

CONTRACT DATA REQUIREMENTS LIST (1 Data Item)						Form Approved OMB No. 0704-0188					
The public reporting burden for this collection of information is estimated to average 110 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing the burden, to the Department of Defense, Executive Services and Communications Directorate (0704-0188). Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to any penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number. Please do not return your form to the above organization. Send completed form to the Government Issuing Contracting Officer for the Contract/PR No. listed in Block E.											
A. CONTRACT LINE ITEM NO.		B. EXHIBIT A		C. CATEGORY: TDP _____ TM _____ OTHER <u>X</u>							
D. SYSTEM/ITEM		E. CONTRACT/PR NO.		F. CONTRACTOR							
1. DATA ITEM NO. A001	2. TITLE OF DATA ITEM Commercial-Off-the-Shelf (COTS) Manual and Associated Supplemental Data			3. SUBTITLE							
4. AUTHORITY (Data Acquisition Document No.) DI-TMSS-80527A		5. CONTRACT REFERENCE PD 1M06-MLEM-KJ-03, Atch		6. REQUIRING OFFICE AFMETCAL ET 1/MLEM							
7. DD 250 REQ LT	9. DIST STATEMENT REQUIRED D	10. FREQUENCY NA	12. DATE OF FIRST SUBMISSION SEE BLK 16	14. DISTRIBUTION							
8. APP CODE NO		11. AS OF DATE SEE BLK 16	13. DATE OF SUBSEQUENT SUBMISSION NA	a. ADDRESSEE		b. COPIES					
						Draft	Final				
						Reg	Repro				
16. REMARKS BLK 9: The following information shall be included on the manuals: DISTRIBUTION STATEMENT D: DoD and US DoD contractors only. BLK 11 & 12. No later than 90 days after contract award one copy of the manual is required. Manual shall be on CD-ROM in Indexed Portable Document Format (iPDF). Ship to addressee #1 listed in Block 14A. BLK 11 & 12. No later than 180 days after contract award and concurrent with delivery of the unit, one copy of the manual is required with the unit. Manual shall be on CD-ROM in Indexed Portable Document Format (iPDF). Ship to addressee #2 listed in Block 14A.				1. AFMETCAL DET 1/MLEM Attn: K. John 813 Irving-Wick Dr W Bldg 2 Heath OH 43056-6116		1					
				2. Ship with unit AFMETCAL RECEIVING AFMETCAL DET 1/MLLW Attn C Cooperrider 813 Irving-Wick Dr W Bldg 4 Door 15 Heath OH 43056-6116		1					
								15. TOTAL		0	2
				G. PREPARED BY Catherine Williams		H. DATE 11 Aug 05		I. APPROVED BY Norm E. Lupton		J. DATE 7 Nov 05	

17. PRICE GROUP
18. ESTIMATED TOTAL PRICE

CONTRACT DATA REQUIREMENTS LIST (1 Data Item)						Form Approved OMB No. 0704-0188				
The public reporting burden for this collection of information is estimated to average 110 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing the burden, to the Department of Defense, Executive Services and Communications Directorate (0704-0188). Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to any penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number. Please do not return your form to the above organization. Send completed form to the Government Issuing Contracting Officer for the Contract/PR No. listed in Block E.										
A. CONTRACT LINE ITEM NO.		B. EXHIBIT A		C. CATEGORY: TDP _____ TM _____ OTHER X						
D. SYSTEM/ITEM Surface Finish Tester		E. CONTRACT/PR NO.		F. CONTRACTOR						
1. DATA ITEM NO. A002	2. TITLE OF DATA ITEM Software Test Plan (STP)			3. SUBTITLE						
4. AUTHORITY (Data Acquisition Document No.) DI-IPSC-81438A		5. CONTRACT REFERENCE PD 1M06-MLEM-KJ-03, Atch		6. REQUIRING OFFICE AFMETCAL DET 1/MLEM						
7. DD 250 REQ LT	9. DIST STATEMENT REQUIRED NA	10. FREQUENCY ASREQ	12. DATE OF FIRST SUBMISSION 150 DAC	14. DISTRIBUTION						
8. APP CODE A		11. AS OF DATE SEE BLK 16	13. DATE OF SUBSEQUENT SUBMISSION ASREQ	a. ADDRESSEE		b. COPIES				
						Final				
				Draft		Reg	Repro			
16. REMARKS BLK 8 - The Government has 30 calendar days to review the preliminary draft. The contractor has 10 calendar days after receipt of Government comments to prepare and deliver the final data. Criteria for approval shall meet the Government comments. BLK 12: No later than 150 days after contract award, one copy of the software test plan is required.				AFMETCAL						
				DET 1/MLK						
				813 Irving-Wick						
				Dr W, Bldg 2						
				Heath OH						
				43056-6116						
				15. TOTAL				0	1	0
				G. PREPARED BY <i>Catherine Williams</i>		H. DATE 16 Aug 05		I. APPROVED BY <i>Y. L. Lupton</i>		J. DATE 2 Nov 05

17. PRICE GROUP
18. ESTIMATED TOTAL PRICE

CONTRACT DATA REQUIREMENTS LIST (2 Data Items)						Form Approved OMB No. 0704-0188		
The public reporting burden for this collection of information is estimated to average 220 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing the burden, to the Department of Defense, Executive Services and Communications Directorate (0704-0188). Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to any penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number. Please do not return your form to the above organization. Send completed form to the Government Issuing Contracting Officer for the Contract/PR No. listed in Block E.								
A. CONTRACT LINE ITEM NO.		B. EXHIBIT A		C. CATEGORY: TDP _____ TM _____ OTHER <u>X</u>				
D. SYSTEM/ITEM Surface Finish Tester		E. CONTRACT/PR NO.		F. CONTRACTOR				
1. DATA ITEM NO. A003	2. TITLE OF DATA ITEM Software Test Report (STR)			3. SUBTITLE				
4. AUTHORITY (Data Acquisition Document No.) DI-IPSC-81440A		5. CONTRACT REFERENCE PD 1M06-MLEM-KJ-03, ATCH		6. REQUIRING OFFICE AFMETCAL DET 1/MLEM				
7. DD 250 REQ LT	9. DIST STATEMENT REQUIRED NA	10. FREQUENCY NA	12. DATE OF FIRST SUBMISSION 180 DAC	14. DISTRIBUTION				
8. APP CODE NO		11. AS OF DATE SEE BLK 16	13. DATE OF SUBSEQUENT SUBMISSION NA	a. ADDRESSEE		b. COPIES		
16. REMARKS BLK 11 - Concurrent with delivery of the production unit, one copy of the test report is required.						Draft	Final	
							Reg	Repro
				Ship with unit			1	
15. TOTAL				→		0	1 0	
1. DATA ITEM NO. A004	2. TITLE OF DATA ITEM Software User Manual (SUM)			3. SUBTITLE				
4. AUTHORITY (Data Acquisition Document No.) DI-IPSC-81443A		5. CONTRACT REFERENCE PD 1M06-MLEM-KJ-03, ATCH		6. REQUIRING OFFICE AFMETCAL DET 1/MLEM				
7. DD 250 REQ LT	9. DIST STATEMENT REQUIRED D	10. FREQUENCY NA	12. DATE OF FIRST SUBMISSION 180 DAC	14. DISTRIBUTION				
8. APP CODE NO		11. AS OF DATE SEE BLK 16	13. DATE OF SUBSEQUENT SUBMISSION NA	a. ADDRESSEE		b. COPIES		
16. REMARKS BLK 9 - The following information shall be included on the manuals: DISTRIBUTION STATEMENT D: DoD and US DoD contractors only. BLK 11 - Concurrent with delivery of the production unit, one copy of the software user manual is required. Manual shall be on CD-ROM in Indexed Portable Document Format (iPDF).						Draft	Final	
							Reg	Repro
				Ship with unit			1	
15. TOTAL				→		0	1 0	
G. PREPARED BY <i>Catherine Williams</i>		H. DATE 16 August		I. APPROVED BY <i>Thomas E. Lynch</i>		J. DATE 2 Nov 05		

17. PRICE GROUP
18. ESTIMATED TOTAL PRICE

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DATA ITEM DESCRIPTION			Form Approved OMB No. 0704-0188	
Public reporting burden for this collection of information is estimated to average 110 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503.				
1. TITLE Commercial Off-the-Shelf (COTS) Manual and Associated Supplemental Data			2. IDENTIFICATION NUMBER DI-TMSS-80527A (T)	
3. DESCRIPTION / PURPOSE A COTS manual contains technical information on the assembly, installation, operation, parts, and maintenance of commercial equipment. this type of manual is published by the manufacturer and furnished to the purchaser usually at no cost.				
4. APPROVAL DATE (YYMMDD) 052197	5. OFFICE OF PRIMARY RESPONSIBILITY (OPR) A/AMXLS-AP	6a. DTIC APPLICABLE	6b. GIDEP APPLICABLE	
7. APPLICATION / INTERRELATIONSHIP 1. This data item is invoked when it has been determined that the manufacturer's manual is acceptable, as published or with minor changes, for Government use. 2. This data item description is to be used to acquire acceptable commercial off-the-shelf manuals or to acquire supplemental data. 3. This data item description supersedes DI-TMSS-80527 and DI-TMSS-80528.				
8. APPROVAL LIMITATION		9a. APPLICABLE FORMS	9b. AMSC NUMBER A7233	
10. PREPARATION INSTRUCTIONS 1. The manual shall contain all technical information on the assembly, installation, operation, parts, and maintenance of commercial equipment. 2. The manual may be supplemented with existing data to comply with the contract. 3. The basic manual shall be in the contractor's format. Supplemental data shall be in the format specified by the contracting activity. MIL-HDBK-1221 may be used as guidance. (T) 4. Deleted.				
11. DISTRIBUTION DISTRIBUTION STATEMENT A: Approved for public release; distribution is unlimited.				

DATA ITEM DESCRIPTION

Title: SOFTWARE TEST PLAN (STP)

Number: DI-IPSC-81438A

AMSC Number: N7363

DTIC Applicable:

Office of Primary Responsibility: NAVY/EC

Applicable Forms:

Use, Relationships:

Approval Date: 19991215

Limitation:

GIDEP Applicable:

The Software Test Plan (STP) describes plans for qualification testing of Computer Software Configuration Items (CSCIs) and software systems. It describes the software test environment to be used for the testing, identifies the tests to be performed, and provides schedules for test activities.

There is usually a single STP for a project. The STP enables the acquirer to assess the adequacy of planning for CSCI and, if applicable, software system qualification testing.

This Data Item Description (DID) contains the format and content preparation instructions for the data product generated by specific and discrete task requirements as delineated in the contract.

This DID is used when the developer is tasked to develop and record plans for conducting qualification testing and/or system qualification testing of a software system.

This DID supersedes DI-IPSC-81438.

Requirements:

1. Reference documents. None.

2. General instructions.

a. Automated techniques. Use of automated techniques is encouraged. The term "document" in this DID means a collection of data regardless of its medium.

b. Alternate presentation styles. Diagrams, tables, matrices, and other presentation styles are acceptable substitutes for text when data required by this DID can be made more readable using these styles.

3. Format. Following are the format requirements.

The plan shall be in contractor format unless otherwise specified on the Contract Data Requirements List (CDRL)(DD 1423). The CDRL should specify whether deliverable data are to be delivered on paper or electronic media; are to be in a given electronic form (such as ASCII,

CALS, or compatible with a specified word processor or other support software); may be delivered in developer format rather than in the format specified herein; and may reside in a computer-aided software engineering (CASE) or other automated tool rather than in the form of a traditional document.

4. Content. The plan shall contain the following:

a. Title page or identifier. The document shall include a title page containing, as applicable: document number; volume number; version/revision indicator; security markings or other restrictions on the handling of the document; date; document title; name, abbreviation, and any other identifier for the system, subsystem, or item to which the document applies; contract number; CDRL item number; organization for which the document has been prepared; name and address of the preparing organization; and distribution statement. For data in a database or other alternative form, this information shall be included on external and internal labels or by equivalent identification methods.

b. Table of contents. The document shall contain a table of contents providing the number, title, and page number of each titled paragraph, figure, table, and appendix. For data in a database or other alternative form, this information shall consist of an internal or external table of contents containing pointers to, or instructions for accessing, each paragraph, figure, table, and appendix or their equivalents.

c. Page numbering/labeling. Each page shall contain a unique page number and display the document number, including version, volume, and date, as applicable. For data in a database or other alternative form, files, screens, or other entities shall be assigned names or numbers in such a way that desired data can be indexed and accessed.

d. Response to tailoring instructions. If a paragraph is tailored out of this DID, the resulting document shall contain the corresponding paragraph number and title, followed by "This paragraph has been tailored out." For data in a database or other alternative form, this representation need occur only in the table of contents or equivalent.

e. Multiple paragraphs and subparagraphs. Any section, paragraph, or subparagraph in this DID may be written as multiple paragraphs or subparagraphs to enhance readability.

f. Standard data descriptions. If a data description required by this DID has been published in a standard data element dictionary specified in the contract, reference to an entry in that dictionary is preferred over including the description itself.

g. Substitution of existing documents. Commercial or other existing documents may be substituted for all or part of the document if they contain the required data.

The numbers shown designate the paragraph numbers to be used in the document.

1. Scope. This section shall be divided into the following paragraphs.

1.1 Identification. This paragraph shall contain a full identification of the system and the software to which this document applies, including, as applicable, identification number(s), title(s), abbreviation(s), version number(s), and release number(s).

1.2 System overview. This paragraph shall briefly state the purpose of the system and the software to which this document applies. It shall describe the general nature of the system and software; summarize the history of system development, operation, and maintenance; identify the project sponsor, acquirer, user, developer, and support agencies; identify current and planned operating sites; and list other relevant documents.

1.3 Document overview. This paragraph shall summarize the purpose and contents of this document and shall describe any security or privacy considerations associated with its use.

1.4 Relationship to other plans. This paragraph shall describe the relationship, if any, of the STP to related project management plans.

2. Referenced documents. This section shall list the number, title, revision, and date of all documents referenced in this document. This section shall also identify the source for all documents not available through normal Government stocking activities.

3. Software test environment. This section shall be divided into the following paragraphs to describe the software test environment at each intended test site. reference may be made to the Software Development Plan (SDP) for resources that are described here.

3.x (Name of test site(s)). This paragraph shall identify one or more test sites to be used for the testing, and shall be divided into the following subparagraphs to describe the software test environment at the site(s). If all tests will be conducted at a single site, this paragraph and its subparagraphs shall be presented only once. If multiple test sites use the same or similar software test environments, they may be discussed together. Duplicative information among test site descriptions may be reduced by referencing earlier descriptions.

3.x.1 Software items. This paragraph shall identify by name, number, and version, as applicable, the software items (e.g., operating systems, compilers, communications software, related applications software, databases, input files, code auditors, dynamic path analyzers, test drivers, preprocessors, test data generators, test control software, other special test software, post-processors) necessary to perform the planned testing activities at the test site(s). This paragraph shall describe the purpose of each item, describe its media (tape, disk, etc.), identify those that are expected to be supplied by the site, and identify any classified processing or other security or privacy issues associated with the software items.

3.x.2 Hardware and firmware items. This paragraph shall identify by name, number, and version, as applicable, the computer hardware, interfacing equipment, communications equipment, test data reduction equipment, apparatus such as extra peripherals (tape drives, printers, plotters), test message generators, test timing devices, test event records, etc., and firmware items that will be used in the software test environment at the test site(s). This paragraph shall describe the purpose of each item, state the period of usage and the number of

each item needed, identify those that are expected to be supplied by the site, and identify any classified processing or other security or privacy issues associated with the items.

3.x.3 Other materials. This paragraph shall identify and describe any other materials needed for the testing at the test site(s). These materials may include manuals, software listings, media containing the software to be tested, media containing data to be used in the tests, sample listings of outputs, and other forms or instructions. This paragraph shall identify those items that are to be delivered to the site and those that are expected to be supplied by the site. The description shall include the type, layout, and quantity of the materials, as applicable. This paragraph shall identify any classified processing or other security or privacy issues associated with the items.

3.x.4 Proprietary nature, acquirer's rights, and licensing. This paragraph shall identify the proprietary nature, acquirer's rights, and licensing issues associated with each element of the software test environment.

3.x.5 Installation, testing, and control. This paragraph shall identify the developer's plans for performing each of the following, possibly in conjunction with personnel at the test site(s):

- a. Acquiring or developing each element of the software test environment
- b. Installing and testing each item of the software test environment prior to its use
- c. Controlling and maintaining each item of the software test environment

3.x.6 Participating organizations. This paragraph shall identify the organizations that will participate in the testing at the test site(s) and the roles and responsibilities of each.

3.x.7 Personnel. This paragraph shall identify the number, type, and skill level of personnel needed during the test period at the test site(s), the dates and times they will be needed, and any special needs, such as multishift operation and retention of key skills to ensure continuity and consistency in extensive test programs.

3.x.8 Orientation plan. This paragraph shall describe any orientation and training to be given before and during the testing. This information shall be related to the personnel needs given in 3.x.7. This training may include user instruction, operator instruction, maintenance and control group instructions, and orientation briefings to staff personnel. If extensive training is anticipated, a separate plan may be developed and referenced here.

3.x.9 Tests to be performed. This paragraph shall identify, by referencing section 4, the tests to be performed at the test site(s).

4. Test identification. This section shall be divided into the following paragraphs to identify and describe each test to which this STP applies.

4.1 General information. This paragraph shall be divided into subparagraphs to present general information applicable to the overall testing to be performed.

4.1.1 Test levels. This paragraph shall describe the levels at which testing will be performed, for example, CSCI level or system level.

4.1.2 Test classes. This paragraph shall describe the types or classes of tests that will be performed (for example, timing tests, erroneous input tests, maximum capacity tests).

4.1.3 General test conditions. This paragraph shall describe conditions that apply to all of the tests or to a group of tests. For example: Each test shall include nominal, maximum, and minimum values;” “each test of type x shall use live data;” “execution size and time shall be measured for each CSCI.” Included shall be a statement of the extent of testing to be performed and rationale for the extent selected. The extent of testing shall be expressed as a percentage of some well defined total quantity, such as the number of samples of discrete operating conditions or values, or other sampling approach. Also included shall be the approach to be followed for retesting/regressing testing.

4.1.4 Test progression. In case of progressive or cumulative tests, this paragraph shall explain the planned sequence or progression of tests.

4.1.5 Data recording, reduction, and analysis. This paragraph shall identify and describe the data recording, reduction, and analysis procedures to be used during and after the tests identified in this STP. These procedures shall include, as applicable, manual, automatic, and semi-automatic techniques for recording test results, manipulating the raw results into a form suitable for evaluation, and retaining the results of data reduction and analysis.

4.2 Planned tests. This paragraph shall be divided into the following subparagraphs to describe the total scope of the planned testing.

4.2.x (Item(s) to be tested). This paragraph shall identify a CSCI, subsystem, system, or other entity by name and project-unique identifier, and shall be divided into the following subparagraphs to describe the testing planned for the item(s). (Note: the “tests” in this plan are collections of test cases. There is no intent to describe each test case in this document.)

4.2.x.y (Project-unique identifier of a test). This paragraph shall identify a test by project-unique identifier and shall provide the information specified below for the test. Reference may be made as needed to the general information in 4.1.

- a. Test objective
- b. Test level
- c. Test type or class
- d. Qualification method(s) as specified in the requirements specification

e. Identifier of the CSCI requirements and, if applicable, software system requirements addressed by this test. (Alternatively, this information may be provided in Section 6.)

f. Special requirements (for example, 48 hours of continuous facility time, weapon simulation, extent of test, use of a special input or database)

g. Type of data to be recorded

h. Type of data recording/reduction/analysis to be employed

i. Assumptions and constraints, such as anticipated limitations on the test due to system or test conditions--timing, interfaces, equipment, personnel, database, etc.

j. Safety, security, and privacy considerations associated with the test

5. Test schedules. This section shall contain or reference the schedules for conducting the tests identified in this plan. It shall include:

a. A listing or chart depicting the sites at which the testing will be scheduled and the time frames during which the testing will be conducted

b. A schedule for each test site depicting the activities and events listed below, as applicable, in chronological order with supporting narrative as necessary:

1) On-site test period and periods assigned to major portions of the testing

2) Pretest on-site period needed for setting up the software test environment and other equipment, system debugging, orientation, and familiarization

3) Collection of database/data file values, input values, and other operational data needed for the testing

4) Conducting the tests, including planned retesting

5) Preparation, review, and approval of the Software Test Report (STR)

6. Requirements traceability. This paragraph shall contain:

a. Traceability from each test identified in this plan to the CSCI requirements and, if applicable, software system requirements it addresses. (Alternatively, this traceability may be provided in 4.2.x.y and referenced from this paragraph.)

b. Traceability from each CSCI requirement and, if applicable, each software system requirement covered by this test plan to the test(s) that address it. The traceability shall cover the CSCI requirements in all-applicable Software Requirements Specifications (SRSs) and

associated Interface Requirements Specifications (IRSs), and, for software systems, the system requirements in all applicable System/Subsystem Specifications (SSSs) and associated system-level IRSs.

7. Notes. This section shall contain any general information that aids in understanding this document (e.g., background information, glossary, rationale). This section shall include an alphabetical listing of all acronyms, abbreviations, and their meanings as used in this document and a list of any terms and definitions needed to understand this document.

A. Appendices. Appendices may be used to provide information published separately for convenience in document maintenance (e.g., charts classified data). As applicable, each appendix shall be referenced in the main body of the document where the data would normally have been provided. Appendixes may be bound as separate documents for ease in handling. Appendixes shall be lettered alphabetically (A, B, etc.).

END OF DI-IPSC-81438A

DATA ITEM DESCRIPTION

Title: SOFTWARE TEST REPORT (STR)

Number: DI-IPSC-81440A

Approval Date: 19991215

AMSC Number: N7365

Limitation:

DTIC Applicable:

GIDEP Applicable:

Office of Primary Responsibility: N/SPAWAR

Applicable Forms:

Use, Relationships:

The Software Test Report (STR) is a record of the qualification testing performed on a Computer Software Configuration Item (CSCI), a software system or subsystem, or other software-related item.

The STR enables the acquirer to assess the testing and its results.

This Data Item Description (DID) contains the format and content preparation instructions for the data product generated by specific and discrete task requirements as delineated in the contract.

This DID is used when the developer is tasked to analyze and record the results of CSCI qualification testing, system qualification testing of a software system, or other testing identified in the contract.

This DID supersedes DI-IPSC-81440.

Requirements:

1. Reference documents. None.

2. General instructions.

a. Automated techniques. Use of automated techniques is encouraged. The term "document" in this DID means a collection of data regardless of its medium.

b. Alternate presentation styles. Diagrams, tables, matrices, and other presentation styles are acceptable substitutes for text when data required by this DID can be made more readable using these styles.

3. Format. Following are the format requirements.

The report shall be in contractor format unless otherwise specified on the Contract Data Requirements List (CDRL)(DD 1423). The CDRL should specify whether deliverable data are to be delivered on paper or electronic media; are to be in a given electronic form (such as ASCII, CALS, or compatible with a specified word processor or other support software); may be

delivered in developer format rather than in the format specified herein; and may reside in a computer-aided software engineering (CASE) or other automated tool rather than in the form of a traditional document.

4. Content. The report shall contain the following:

a. Title page or identifier. The document shall include a title page containing, as applicable: document number; volume number; version/revision indicator; security markings or other restrictions on the handling of the document; date; document title; name, abbreviation, and any other identifier for the system, subsystem, or item to which the document applies; contract number; CDRL item number; organization for which the document has been prepared; name and address of the preparing organization; and distribution statement. For data in a database or other alternative form, this information shall be included on external and internal labels or by equivalent identification methods.

b. Table of contents. The document shall contain a table of contents providing the number, title, and page number of each titled paragraph, figure, table, and appendix. For data in a database or other alternative form, this information shall consist of an internal or external table of contents containing pointers to, or instructions for accessing, each paragraph, figure, table, and appendix or their equivalents.

c. Page numbering/labeling. Each page shall contain a unique page number and display the document number, including version, volume, and date, as applicable. For data in a database or other alternative form, files, screens, or other entities shall be assigned names or numbers in such a way that desired data can be indexed and accessed.

d. Response to tailoring instructions. If a paragraph is tailored out of this DID, the resulting document shall contain the corresponding paragraph number and title, followed by "This paragraph has been tailored out." For data in a database or other alternative form, this representation need occur only in the table of contents or equivalent.

e. Multiple paragraphs and subparagraphs. Any section, paragraph, or subparagraph in this DID may be written as multiple paragraphs or subparagraphs to enhance readability.

f. Standard data descriptions. If a data description required by this DID has been published in a standard data element dictionary specified in the contract, reference to an entry in that dictionary is preferred over including the description itself.

g. Substitution of existing documents. Commercial or other existing documents may be substituted for all or part of the document if they contain the required data.

The numbers shown designate the paragraph numbers to be used in the document.

1. Scope. This section shall be divided into the following paragraphs.

1.1 Identification. This paragraph shall contain a full identification of the system and the software to which this document applies, including, as applicable, identification number(s), title(s), abbreviation(s), version number(s), and release number(s).

1.2 System overview. This paragraph shall briefly state the purpose of the system and the software to which this document applies. It shall describe the general nature of the system and software; summarize the history of system development, operation, and maintenance; identify the project sponsor, acquirer, user, developer, and support agencies; identify current and planned operating sites; and list other relevant documents.

1.3 Document overview. This paragraph shall summarize the purpose and contents of this document and shall describe any security or privacy considerations associated with its use.

2. Referenced documents. This section shall list the number, title, revision, and date of all documents referenced in this document. This section shall also identify the source for all documents not available through normal Government stocking activities.

3. Overview of test results. This section shall be divided into the following paragraphs to provide an overview of test results.

3.1 Overall assessment of the software tested. This paragraph shall:

- a. Provide an overall assessment of the software as demonstrated by the test results in this report
- b. Identify any remaining deficiencies, limitations, or constraints that were detected by the testing performed. Problem/change reports may be used to provide deficiency information.
- c. For each remaining deficiency, limitation, or constraint, describe:
 - 1) Its impact on software and system performance, including identification of requirements not met
 - 2) The impact on software and system design to correct it
 - 3) A recommended solution/approach for correcting it

3.2 Impact of test environment. This paragraph shall provide an assessment of the manner in which the test environment may be different from the operational environment and the effect of this difference on the test results.

3.3 Recommended improvements. This paragraph shall provide any recommended improvements in the design, operation, or testing of the software tested. A discussion of each recommendation and its impact on the software may be provided. If no recommended improvements are provided, this paragraph shall state "None."

4. Detailed test results. This section shall be divided into the following paragraphs to describe the detailed results for each test. Note: The word “test” means a related collection of test cases.

4.x (Project-unique identifier of a test). This paragraph shall identify a test by project-unique identifier and shall be divided into the following subparagraphs to describe the test results.

4.x.1 Summary of test results. This paragraph shall summarize the results of the test. The summary shall include, possibly in a table, the completion status of each test case associated with the test (for example, “all results as expected,” “problems encountered,” “deviations required”). When the completion status is not “as expected,” this paragraph shall reference the following paragraphs for details.

4.x.2 Problems encountered. This paragraph shall be divided into subparagraphs that identify each test case in which one or more problems occurred.

4.x.2.y (Project-unique identifier of a test case). This paragraph shall identify by project-unique identifier a test case in which one or more problems occurred, and shall provide:

- a. A brief description of the problem(s) that occurred
- b. Identification of the test procedure step(s) in which they occurred
- c. Reference(s) to the associated problem/change report(s) and backup data, as applicable
- d. The number of times the procedure or step was repeated in attempting to correct the problem(s) and the outcome of each attempt
- e. Back-up points or test steps where tests were resume for retesting

4.x.3 Deviations from test cases/procedures. This paragraph shall be divided into subparagraphs that identify each test case in which deviations from test case/test procedures occurred.

4.x.3.y (Project-unique identifier of a test case). This paragraph shall identify by project-unique identifier a test case in which one or more deviations occurred, and shall provide:

- a. A description of the deviation(s) (for example, test case run in which the deviation occurred and nature of the deviation, such as substitution of required equipment, procedural steps not followed, schedule deviations). (Red-lined test procedures may be used to show the deviations)
- b. The rationale for the deviation(s)
- c. An assessment of the deviations’ impact on the validity of the test case

5. Test log. This section shall present, possibly in a figure or appendix, a chronological record of the test events covered by this report. This test log shall include:

a. The date(s), time(s), and location(s) of the tests performed

b. The hardware and software configurations used for each test including, as applicable, part/model/serial number, manufacturer, revision level, and calibration date of all hardware, and version number and name for the software components used

c. The date and time of each test-related activity, the identify of the individual(s) who performed the activity, and the identities of witnesses, as applicable

6. Notes. This section shall contain any general information that aids in understanding this document (e.g., background information, glossary, rationale). This section shall include an alphabetical listing of all acronyms, abbreviations, and their meanings as used in this document and a list of any terms and definitions needed to understand this document.

A. Appendices. Appendices may be used to provide information published separately for convenience in document maintenance (e.g., charts classified data). As applicable, each appendix shall be referenced in the main body of the document where the data would normally have been provided. Appendixes may be bound as separate documents for ease in handling. Appendixes shall be lettered alphabetically (A, B, etc.).

END OF DI-IPSC-81440A

DATA ITEM DESCRIPTION

Title: SOFTWARE USER MANUAL (SUM)

Number: DI-IPSC-81443A

Approval Date: 20000111

AMSC Number: N7378

Limitation: N/A

DTIC Applicable: No

GIDEP Applicable: No

Office of Primary Responsibility: N/SPAWAR

Applicable Forms: N/A

Use, Relationships:

The Software User Manual (SUM) tells a hands-on software user how to install and use a Computer Software Configuration Item (CSCI), a group of related CSCI's, or a software system or subsystem. It may also cover a particular aspect of software operation, such as instructions for a particular position or task.

The SUM is developed for software that is run by the user and has a user interface requiring on-line user input or interpretation of displayed output. If the software is embedded in a hardware-software system, user manuals or operating procedures for that system may make separate SUMs unnecessary.

This Data Item Description (DID) contains the format and content preparation instructions for the data product generated by specific and discrete task requirements as delineated in the contract.

This DID is used when the developer is tasked to identify and record information needed by hands-on users of software.

The SUM is an alternative to the Software Input/Output Manual (SIOM) (DI-IPSC-81445A) and Software Center Operator Manual (SCOM) (DI-IPSC-81444A).

This DID supersedes DI-IPSC-81443.

Requirements:

1. Reference documents. None.

2. General instructions.

a. Automated techniques. Use of automated techniques is encouraged. The term "document" in this DID means a collection of data regardless of its medium.

b. Alternate presentation styles. Diagrams, tables, matrices, and other presentation styles are acceptable substitutes for text when data required by this DID can be made more readable using these styles.

3. Format. Following are the format requirements.

The specification shall be in contractor format unless otherwise specified on the Contract Data Requirements List (CDRL)(DD 1423). The CDRL should specify whether deliverable data are to be delivered on paper or electronic media; are to be in a given electronic form (such as ASCII, CALS, or compatible with a specified word processor or other support software); may be delivered in developer format rather than in the format specified herein; and may reside in a computer-aided software engineering (CASE) or other automated tool rather than in the form of a traditional document.

4. Content. The specification shall contain the following:

a. Title page or identifier. The document shall include a title page containing, as applicable: document number; volume number; version/revision indicator; security markings or other restrictions on the handling of the document; date; document title; name, abbreviation, and any other identifier for the system, subsystem, or item to which the document applies; contract number; CDRL item number; organization for which the document has been prepared; name and address of the preparing organization; and distribution statement. For data in a database or other alternative form, this information shall be included on external and internal labels or by equivalent identification methods.

b. Table of contents and index. The document shall contain a table of contents providing the number, title, and page number of each titled paragraph, figure, table, and appendix, and an index providing an alphabetic listing of key terms and concepts covered in the document and the pages or paragraphs in which the terms or concepts are covered. For data in a database or other alternative form, this information shall consist of an internal or external table of contents containing pointers to, or instructions for accessing, each paragraph, figure, table, and appendix or their equivalents.

c. Page numbering/labeling. Each page shall contain a unique page number and display the document number, including version, volume, and date, as applicable. For data in a database or other alternative form, files, screens, or other entities shall be assigned names or numbers in such a way that desired data can be indexed and accessed.

d. Response to tailoring instructions. If a paragraph is tailored out of this DID, the resulting document shall contain the corresponding paragraph number and title, followed by "This paragraph has been tailored out." For data in a database or other alternative form, this representation need occur only in the table of contents or equivalent.

e. Multiple paragraphs and subparagraphs. Any section, paragraph, or subparagraph in this DID may be written as multiple paragraphs or subparagraphs to enhance readability.

f. Standard data descriptions. If a data description required by this DID has been published in a standard data element dictionary specified in the contract, reference to an entry in that dictionary is preferred over including the description itself.

g. Substitution of existing documents. Commercial or other existing documents may be substituted for all or part of the document if they contain the required data.

The numbers shown designate the paragraph numbers to be used in the document.

1. Scope. This section shall be divided into the following paragraphs.

1.1 Identification. This paragraph shall contain a full identification of the system and the software to which this document applies, including, as applicable, identification number(s), title(s), abbreviation(s), version number(s), and release number(s).

1.2 System overview. This paragraph shall briefly state the purpose of the system and the software to which this document applies. It shall describe the general nature of the system and software; summarize the history of system development, operation, and maintenance; identify the project sponsor, acquirer, user, developer, and support agencies; identify current and planned operating sites; and list other relevant documents.

1.3 Document overview. This paragraph shall summarize the purpose and contents of this document and shall describe any security or privacy considerations associated with its use.

2. Referenced documents. This section shall list the number, title, revision, and date of all documents referenced in this document. This section shall also identify the source for all documents not available through normal Government stocking activities.

3. Software summary. This section shall be divided into the following paragraphs.

3.1 Software application. This paragraph shall provide a brief description of the intended uses of the software. Capabilities, operating improvements, and benefits expected from its use shall be described.

3.2 Software inventory. This paragraph shall identify all software files, including databases and data files, that must be installed for the software to operate. The identification shall include security and privacy considerations for each file and identification of the software necessary to continue or resume operation in case of an emergency.

3.3 Software environment. This paragraph shall identify the hardware, software, manual operations, and other resources needed for a user to install and run the software. Included, as applicable, shall be identification of:

a. Computer equipment that must be present, including amount of memory needed, amount of auxiliary storage needed, and peripheral equipment such as printers and other input/output devices

b. Communications equipment that must be present

- c. Other software that must be present, such as operating systems, databases, data files, utilities, and other supporting systems
- d. Forms, procedures, or other manual operations that must be present
- e. Other facilities, equipment, or resources that must be present

3.4 Software organization and overview of operation. This paragraph shall provide a brief description of the organization and operation of the software from the user's point of view. The description shall include, as applicable:

- a. Logical components of the software, from the user's point of view, and an overview of the purpose/operation of each component
- b. Performance characteristics that can be expected by the user, such as:
 - 1) Types, volumes, rate of inputs accepted
 - 2) Types, volume, accuracy, rate of outputs that the software can produce
 - 3) Typical response time and factors that affect it
 - 4) Typical processing time and factors that affect it
 - 5) Limitations, such as number of events that can be tracked
 - 6) Error rate that can be expected
 - 7) Reliability that can be expected
- c. Relationship of the functions performed by the software with interfacing systems, organizations, or positions
- d. Supervisory controls that can be implemented (such as passwords) to manage the software

3.5 Contingencies and alternate states and modes of operation. This paragraph shall explain differences in what the user will be able to do with the software at times of emergency and in various states and modes of operation, if applicable.

3.6 Security and privacy. This paragraph shall contain an overview of the security and privacy considerations associated with the software. A warning shall be included regarding making unauthorized copies of software or documents, if applicable.

3.7 Assistance and problem reporting. This paragraph shall identify points of contact and procedures to be followed to obtain assistance and report problems encountered in using the software.

4. Access to the software. This section shall contain step-by-step procedures oriented to the first time/occasional user. Enough detail shall be presented so that the user can reliably access the software before learning the details of its functional capabilities. Safety precautions, marked by WARNING or CAUTION, shall be included where applicable.

4.1 First-time user of the software. This paragraph shall be divided into the following subparagraphs.

4.1.1 Equipment familiarization. This paragraph shall describe the following as appropriate:

- a. Procedures for turning on power and making adjustments
- b. Dimensions and capabilities of the visual display screen
- c. Appearance of the cursor, how to identify an active cursor if more than one cursor can appear, how to position a cursor, and how to use a cursor
- d. Keyboard layout and role of different types of keys and pointing devices
- e. Procedures for turning power off if special sequencing of operations is needed

4.1.2 Access control. This paragraph shall present an overview of the access and security features of the software that are visible to the user. The following items shall be included, as applicable:

- a. How and from whom to obtain a password
- b. How to add, delete, or change passwords under user control
- c. Security and privacy considerations pertaining to the storage and marking of output reports and other media that the user will generate

4.1.3 Installation and setup. This paragraph shall describe any procedures that the user must perform to be identified or authorized to access or install software on the equipment, to perform the installation, to configure the software, to delete or overwrite former files or data, and to enter parameters for software operation.

4.2 Initiating a session. This paragraph shall provide step-by-step procedures for beginning work, including any options available. A checklist for problem determination shall be included in case difficulties are encountered.

4.3 Stopping and suspending work. This paragraph shall describe how the user can cease or interrupt use of the software and how to determine whether normal termination or cessation has occurred.

5. Processing reference guide. This section shall provide the user with procedures for using the software. If procedures are complicated or extensive, additional Sections 6, 7, ... may be added in the same paragraph structure as this section and with titles meaningful to the sections selected. The organization of the document will depend on the characteristics of the software being documented. For example, one approach is to base the sections on the organizations in which users work, their assigned positions, their work sites, or the tasks they must perform. For other software, it may be more appropriate to have Section 5 be a guide to menus, Section 6 be a guide to the command language used, and Section 7 be a guide to functions. Detailed procedures are intended to be presented in subparagraphs of paragraph 5.3. Depending on the design of the software, the subparagraphs might be organized on a function-by-function, menu-by-menu, transaction-by-transaction, or other basis. Safety precautions, marked by WARNING or CAUTION, shall be included where applicable.

5.1 Capabilities. This paragraph shall briefly describe the interrelationships of the transactions, menus, functions, or other processes in order to provide an overview of the use of the software.

5.2 Conventions. This paragraph shall describe any conventions used by the software, such as the use of colors in displays, the use of audible alarms, the use of abbreviated vocabulary, and the use of rules for assigning names or codes.

5.3 Processing procedures. This paragraph shall explain the organization of subsequent paragraphs, e.g., by function, by menu, by screen. Any necessary order in which procedures must be accomplished shall be described.

5.3.x (Aspect of software use). The title of this paragraph shall identify the function, menu, transaction, or other process being described. This paragraph shall describe and give options and examples, as applicable, of menus, graphical icons, data entry forms, user inputs, inputs from other software or hardware that may affect the software's interface with the user, outputs, diagnostic or error messages or alarms, and help facilities that can provide on-line descriptive or tutorial information. The format for presenting this information can be adapted to the particular characteristics of the software, but a consistent style of presentation shall be used, i.e., the descriptions of menus shall be consistent, the descriptions of transactions shall be consistent among themselves.

5.4 Related processing. This paragraph shall identify and describe any related batch, offline, or background processing performed by the software that is not invoked directly by the user and is not described in paragraph 5.3. Any user responsibilities to support this processing shall be specified.

5.5 Data backup. This paragraph shall describe procedures for creating and retaining backup data that can be used to replace primary copies of data in event of errors, defects, malfunctions, or accidents.

5.6 Recovery from errors, malfunctions, and emergencies. This paragraph shall present detailed procedures for restart or recovery from errors or malfunctions occurring during processing and for ensuring continuity of operations in the event of emergencies.

5.7 Messages. This paragraph shall list, or refer to an appendix that lists, all error messages, diagnostic messages, and information messages that can occur while accomplishing any of the user's functions. The meaning of each message and the action that should be taken after each such message shall be identified and described.

5.8 Quick-reference guide. If appropriate to the software, this paragraph shall provide or reference a quick-reference card or page for using the software. This quick-reference guide shall summarize, as applicable, frequently used function keys, control sequences, formats, commands, or other aspects of software use.

6. Notes. This section shall contain any general information that aids in understanding this document (e.g., background information, glossary, rationale). This section shall include an alphabetical listing of all acronyms, abbreviations, and their meanings as used in this document and a list of any terms and definitions needed to understand this document. If Section 5 has been expanded into section(s) 6, ..., this section shall be numbered as the next section following section n.

A. Appendices. Appendices may be used to provide information published separately for convenience in document maintenance (e.g., charts classified data). As applicable, each appendix shall be referenced in the main body of the document where the data would normally have been provided. Appendixes may be bound as separate documents for ease in handling. Appendixes shall be lettered alphabetically (A, B, etc.).

END OF DI-IPSC-81443A.